Empathy Map

smart waste management system for metro cities using IOT

Thinks in reduction in overflows and landfills

Feels reduction in collection cost

Waste generation analysis taken to for all metrocities

Think no missed pickups and reduced overflows

What do they THINK AND FEEL?

what really counts

major preoccupations

worries & aspirations

Knowing the fill-level of a dustbins without having to visit the specific location makes it easier to allocate resources effective

Reduce the no of bins required- declutter and improving the street scene and using IOT make advanced in metro cities

Encourage recycling-on-the-go by ensuring Dustbins aren't over-flowing. Residents will be encouraged to put the right thing in the right bin when they're out and about.

21 standard bins were replaced with 10 "Compactor smart bins:. that squash the bins to fit more in and remotely report on fill levels

Smart Dustbin is just a normal bin where everyone can dispose waste but integration of some hardware components is done for more efficient use of it

Level of street cleanliness were not affected

SMART WASTE MANAGEMENT SYSTEM IN METRO CITIES

smart waste

What do they HEAR?

what friends say

what boss say

what influencers say

What do they SEE?

environment

friends

what the market offers

What do they SAY AND DO?

attitude in public

appearance

behavior towards others

DISPLAY: Smart indicators on the front display panel

DEODORIZER: Foul odor elimination
DURABLE & LONG LIFE: Made with high quality materials for a long durable life

OPERATION: Automatic sensor based operation with zero manual intervention

HYGIENIC: Hygienic disposal with automatic and touch-less waste disposal
DISPLAY: Smart indicators on the front display panel

ENSURE HEALTH AND SAFETY WITH SMART DUSTBINS
Smart Dustbin is an intelligent dustbin that provides you 100% hygienic solution to everyday waste management.

waste collection can use the smart waste management software to optimize their collection routes

PAIN

fears

frustrations

obstacles

Misunderstanding of the operations of smart sensors

Non-optimized truck routes

Non-uniform waste distribution of waste in bins

Shortfall of public knowledge and awareness

It's difficult to link systems from different vendors

The systems can be costly initially because for more testing required

GAIN

"wants" / needs

measures of success

obstacles

It reduces infrastructure, operating and maintenance costs by upto 30%.

Optimized Routes are easy to choose Data analytics

Eco-Friendly and improve efficiency

It keeps our surroundings clean and green and free from bad odor of wastes, emphasizes on healthy environment and keep cities more beautiful

Applying smart waste management process to the city optimizes management, resources and costs which makes it a "smart city"

Transparency and Sustainability